

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

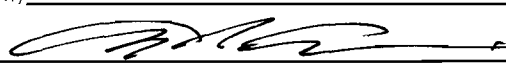
AMENDED REPORT ☐  
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>		5. MINERAL LEASE NO: <b>ML-47065</b>	6. SURFACE: <b>State</b>
1A. TYPE OF WORK: <b>DRILL</b> <input checked="" type="checkbox"/> <b>REENTER</b> <input type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
8. TYPE OF WELL: <b>OIL</b> <input type="checkbox"/> <b>GAS</b> <input checked="" type="checkbox"/> <b>OTHER</b> _____ <b>SINGLE ZONE</b> <input checked="" type="checkbox"/> <b>MULTIPLE ZONE</b> <input type="checkbox"/>		8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>Enduring Resources, LLC</b>		9. WELL NAME and NUMBER: <b>Southam Canyon 10-23-42-32</b>	
3. ADDRESS OF OPERATOR: <b>475 17th St., Ste 1500    CITY Denver    STATE CO    ZIP 80220</b>		10. FIELD AND POOL, OR WILDCAT: <b>Undesignated</b>	
4. LOCATION OF WELL (FOOTAGES)  AT SURFACE: <b>1,950' FNL - 500' FEL</b> AT PROPOSED PRODUCING ZONE: <b>Same</b>		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SENE 32 10S 23E S</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>71.1 miles southeasterly of Vernal, Utah</b>		12. COUNTY: <b>Uintah</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>500'</b>	16. NUMBER OF ACRES IN LEASE: <b>640</b>	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40 acres</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1000' +</b>	19. PROPOSED DEPTH: <b>8,105</b>	20. BOND DESCRIPTION: <b>RLB0008031</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>5730'    RT-KB</b>	22. APPROXIMATE DATE WORK WILL START: <b>5/1/2006</b>	23. ESTIMATED DURATION: <b>20 days</b>	

24. PROPOSED CASING AND CEMENTING PROGRAM							
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
20"	14"	line pipe		40	3 yards	Ready Mix	
11"	8-5/8"	J-55	24#	2,000	Premium Lead	138 sxs	3.50    11.1
					Premium Tail	138 sxs	1.15    15.8
7-7/8"	4-1/2"	N-80	11.6#	8,105	Class G	142 sxs	3.3    11.0
					50/50 Poz Class G	871 sxs	1.56    14.3

25. ATTACHMENTS	
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:	
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER  <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN  <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

CONFIDENTIAL

NAME (PLEASE PRINT) <u>Alvin R. (Al) Arlian</u>	TITLE <u>Landman - Regulatory Specialist</u>
SIGNATURE <u></u>	DATE <u>2/20/2006</u>

(This space for State use only)

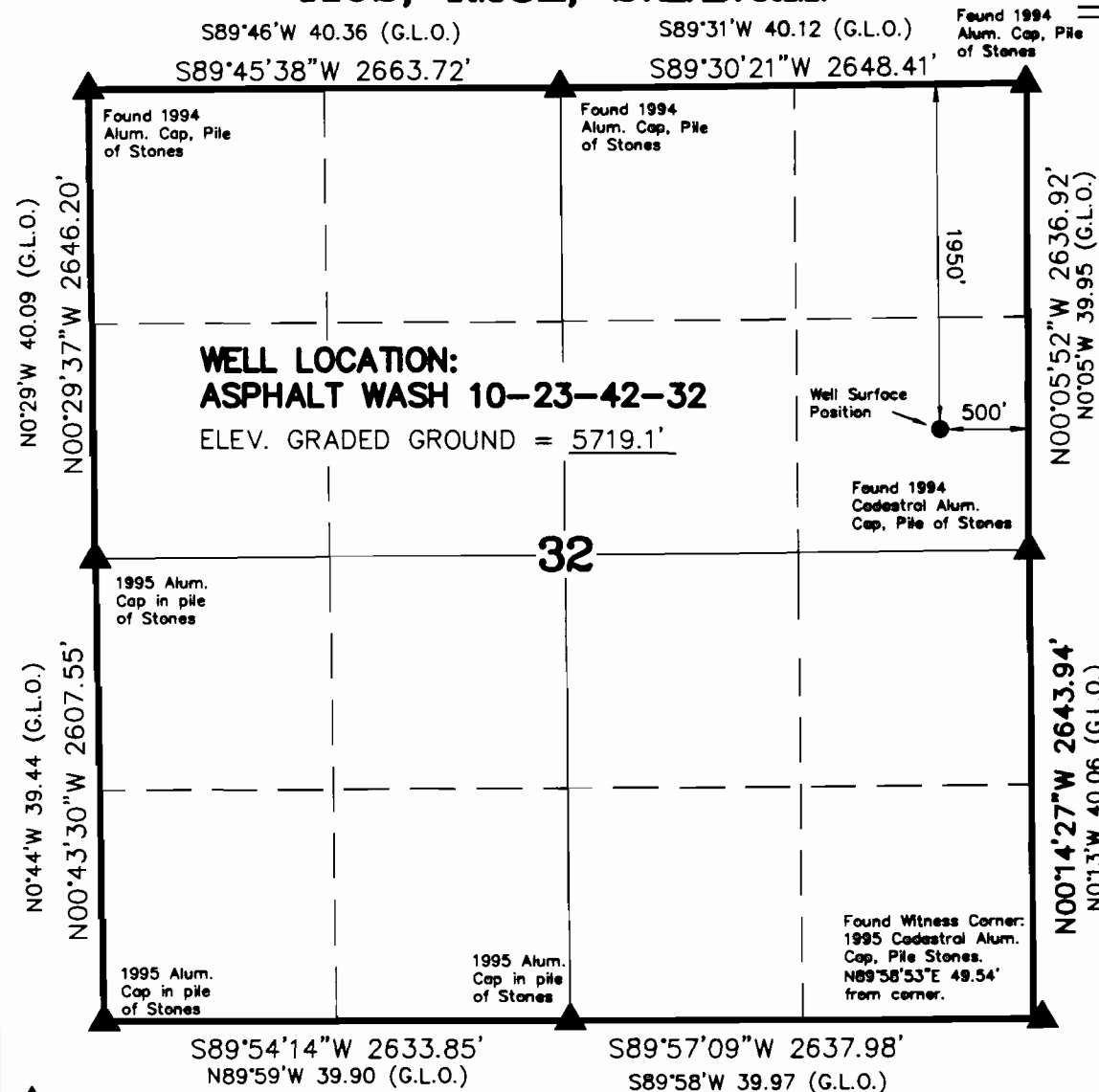
API NUMBER ASSIGNED: 43-047-37825

APPROVAL:

RECEIVED  
FEB 23 2006

# T10S, R23E, S.L.B.&M.

## ENDURING RESOURCES



WELL LOCATION, ASPHALT WASH 10-23-42-32, LOCATED AS SHOWN IN THE SE 1/4 NE 1/4 OF SECTION 32, T10S, R23E, S.L.B.&M. UINTAH COUNTY, UTAH.

### NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION No. 362251  
STATE OF UTAH  
*Kelly R. Kolby*

### TIMBERLINE LAND SURVEYING, INC.

38 WEST 100 NORTH. - VERNAL, UTAH 84078  
(435) 789-1365

DATE SURVEYED: 12-22-05	SURVEYED BY: D.J.S.	SHEET 2 OF 10
DATE DRAWN: 01-09-06	DRAWN BY: B.J.S.	
SCALE: 1" = 1000'	Date Last Revised:	

▲ = SECTION CORNERS LOCATED  
BASIS OF ELEVATION IS TRIANGULATION STATION JEK 19 ET 1966 WHICH IS LOCATED NEAR THE SOUTH 1/4 CORNER OF SECTION 8, T11S, R23E, S.L.B.&M. THE ELEVATION OF THIS TRIANGULATION STATION IS SHOWN ON THE ARCHY BENCH SE 7.5 MIN. QUADRANGLE AS BEING 6054'.

**WELL NAME**  
(Proposed Well Head)  
**NAD 83 Autonomous**  
LATITUDE = 39° 54' 26.33"  
LONGITUDE = 109° 20' 35.14"



***Enduring Resources***

475 17<sup>th</sup> Street Suite 1500 Denver Colorado 80202  
Telephone 303 573-1222 Fax 303 573 0461

February 20, 2006

Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

Attn.: Ms. Diana Whitney

RE: Enduring Resources, LLC  
**Southam Canyon 10-23-42-32**  
SENE Sec 32-10S-23E  
Uintah County, Utah  
Lease # ML-47065

Dear Ms. Whitney:

Enclosed are two original applications to drill concerning the above-referenced proposed well. This information was also submitted to SITLA.

Enduring Resources, LLC is requesting the Utah Division of Oil, Gas and Mining to hold this application and all future information as confidential.

If any questions arise or additional information is required, please contact me at 303-350-5114.

Very truly yours,

**ENDURING RESOURCES, LLC**

Alvin R. (Al) Arlian  
Landman-Regulatory Specialist

ara  
Enclosures:

cc: SITLA w/ attachments

RECEIVED

FEB 23 2006

RECEIVED

**Enduring Resources, LLC**  
**Asphalt Wash 10-23-42-32**  
**SE-NE 32-10S-23E**  
**Uintah County, Utah**

**State Lease: ML-47063**

**ONSHORE ORDER 1 - DRILLING PLAN**

**1. Estimated Tops of Geological Markers:**

Formation	Depth (K.B.)
Uinta	Surface
Green River	985'
Wasatch	3735'
Mesaverde	5530'

**2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals:**

Substance	Formation	Depth (K.B.)
	KB-Uinta Elevation: 5730'	
Oil	Green River	985'
Oil /Gas	Wasatch	3735'
Oil /Gas	Mesaverde	5530'
	Estimated TD	8105'

An 11" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

**3. Pressure Control Equipment: (3000 psi schematic attached)**

- A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer on 3,000 psi casinghead, with 3,000 psi choke manifold equipped per the attached diagram. BOPE as specified in *Onshore Oil & Gas Order Number 2*. A PVT, stroke counter and flow sensor will be installed to check for flow and monitor pit volume.
- B. Pressure Rating: 3,000 psi BOPE
- C. Kelly will be equipped with upper and lower Kelly valves.
- D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

#### Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

#### E. Miscellaneous Information:

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*.

#### 4. Proposed Casing & Cementing Program:

##### A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (MD)
20"	14" O.D.				40' (GL)
11"	8-5/8"	24#	J-55	ST&C	0 – 2,016' (KB) est.
7-7/8"	4-1/2"	11.6#	N-80	LT&C	0 – 8,105' (KB)

The surface casing will have guide shoe, 1 joint, insert float collar. Centralize the shoe joint with bowspring centralizers in the middle and top of the joint and the next 16 joints with bowspring centralizers on every other collar (8 centralizers total). Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

#### B. Casing Design Parameters:

Depth (MD)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
40' (GL)	14" OD			
2016' (KB)	8-5/8", 24#/ft, J55, STC	1370/1.52(a)	2950/3.28(b)	244/5.81(c)
8105' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/1.51 (d)	7780/2.01 (e)	223/2.76 (f)

- (a.) based on full evacuation of pipe with 8.6 ppg fluid on annulus
- (b.) based on 8.6 ppg gradient with no fluid on annulus
- (c.) based on casing string weight in 8.6 ppg mud
- (d.) based on full evacuation of pipe with 10.0 ppg fluid on annulus
- (e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient
- (f.) based on casing string weight in 9.2 ppg mud

#### PROPOSED CEMENTING PROGRAM

##### Surface Casing (if well will circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
8-5/8"	Lead	1516	Premium cement + 16% gel + 0.25 pps celloflake	138	25%	11.1	3.50
8-5/8"	Tail	500	Premium cement + 2% CaCl <sub>2</sub> + 0.25 pps celloflake	138	25%	15.8	1.15

A cement top job is required if cement fallback is greater than 10' below ground level. Top job (weight 15.8 ppg, yield 1.15 ft<sup>3</sup>/sx) cement will be premium cement w/ 3% CaCl<sub>2</sub> + 0.25 pps celloflake. Volume as required

##### Surface Casing (if well will not circulate) - Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
8-5/8"	Lead	500	Premium cement + 2% CaCl <sub>2</sub> + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% CaCl <sub>2</sub> + 0.25 pps celloflake	As Req.		15.8	1.15

**Production Casing and Liner** - Cemented TD to 300' above base of surface casing

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
4-1/2"	Lead	1619	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	142	25	11.0	3.3
4-1/2"	Tail	4770	50/50 POZ Class G + 2% gel +1% CaCl <sub>2</sub> + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	871	25	14.3	1.56

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 300' above base of surface casing. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole. Actual cement types may vary due to hole conditions and cement contractor used.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. **Drilling Fluids (mud) Program:**

Interval (MD)	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' – 2016' (KB)		No cntrl		Air/mist
2000'-3000' (KB)	8.4-8.6	No cntrl	28-36	Water
3000'-8105' (KB)	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. **Evaluation Program:**

Tests: No tests are currently planned.

Coring: No cores are currently planned.

Samples: No sampling is currently planned.

Logging

- Dual Induction – SFL /Gamma Ray/Caliper/SP/TDLT/CNL/ML  
TD to Base Surface Casing
- Cement Bond Log / Gamma Ray:  
TD to Base of Surface Casing or Top of Cement if below Base of Surface Casing

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

7. **Abnormal Conditions:**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 4215 psi (calculated at 0.52 psi/foot of hole) and maximum anticipated surface pressure equals approximately 2,432 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. **Anticipated Starting Dates:**

- Anticipated Commencement Date- Within one year of APD issue.
- Drilling Days- Approximately 10 days
- Completion Days - Approximately 10 days
- Anticipate location construction within 30 days of permit issue.

9. **Variances:**

None anticipated

10. **Other:**

A Cultural Resource Inventory and Paleontology reconnaissance shall be conducted for the well location, access route and pipeline. The reports shall be submitted to the Division of Oil, Gas and Mining and the School and Institutional Trust lands Administration upon their receipt.

Single Shot directional surveys will be dropped every 2000 feet to monitor hole angle.



**ENDURING RESOURCES**  
**Asphalt Wash 10-23-42-32**  
**Section 32, T10S, R23E, S.L.B.&M.**

**Road Directions:**

FROM THE INTERSECTION OF U.S. HIGHWAY 40 AND 500 EAST STREET IN VERNAL, UTAH PROCEED IN AN EASTERLY THEN SOUTHERLY DIRECTION ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.3 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 45 APPROXIMATELY 40.5 MILES TO THE JUNCTION OF THE DRAGON ROAD (COUNTY B ROAD 4180). THIS ROAD IS LOCATED APPROXIMATELY 4.8 MILES SOUTH OF BONANZA, UTAH. EXIT LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG COUNTY B ROAD 4180 APPROXIMATELY 4.0 MILES TO THE JUNCTION OF THE KINGS WELLS ROAD (COUNTY B ROAD 4190). EXIT RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION ALONG COUNTY B ROAD 4190 APPROXIMATELY 8.7 MILES TO THE JUNCTION OF THE ATCHEE RIDGE ROAD (COUNTY B ROAD 4270). CONTINUE ALONG COUNTY B ROAD 4190 IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 4.3 MILES TO THE JUNCTION OF THE LONG DRAW ROAD (COUNTY B ROAD 4260). CONTINUE ALONG COUNTY B ROAD 4190 IN A SOUTHERLY, THEN WESTERLY DIRECTION APPROXIMATELY 4.0 MILES TO THE JUNCTION OF COUNTY B ROAD 4160. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4160 APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THE BITTER CREEK ROAD (COUNTY B ROAD 4120). EXIT LEFT AND PROCEED IN A WESTERLY DIRECTION ALONG COUNTY B ROAD 4120 APPROXIMATELY 1.9 MILES TO THE JUNCTION OF COUNTY B ROAD 4230. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4230 APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THE ATCHEES WASH ROAD (COUNTY B ROAD 4240). EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4240 APPROXIMATELY 2.7 MILES TO A CLASS D COUNTY ROAD. EXIT LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE SADDLETREE DRAW ROAD (COUNTY B ROAD 4230); EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4230 APPROXIMATELY 0.8 MILES TO A SERVICE ROAD; EXIT RIGHT AND PROCEED IN AN EASTERLY THEN NORTHERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 2.2 MILES TO THE PROPOSED ACCESS ROAD FOR THE ASPHALT WASH 10-23-13-33 WELL. FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 8,070 FEET TO THE PROPOSED 13-33 WELL PAD. PROCEED NORTHWESTERLY ACROSS THE WELL PAD APPROXIMATELY 200 FEET TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 1,670 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 77.1 MILES IN A SOUTHEASTERLY DIRECTION.

**Enduring Resources, LLC  
Asphalt Wash 10-23-42-32  
SE-NE 32-10S-23E  
Uintah County, Utah**

**State Lease: ML-47063**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. Existing Roads:**

**23**

**Directions to the Southam Canyon 10-23-42-32 Well Pad**

FROM THE INTERSECTION OF U.S. HIGHWAY 40 AND 500 EAST STREET IN VERNAL, UTAH PROCEED IN AN EASTERLY THEN SOUTHERLY DIRECTION ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.3 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 45 APPROXIMATELY 40.5 MILES TO THE JUNCTION OF THE DRAGON ROAD (COUNTY B ROAD 4180). THIS ROAD IS LOCATED APPROXIMATELY 4.8 MILES SOUTH OF BONANZA, UTAH. EXIT LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG COUNTY B ROAD 4180 APPROXIMATELY 4.0 MILES TO THE JUNCTION OF THE KINGS WELLS ROAD (COUNTY B ROAD 4190). EXIT RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION ALONG COUNTY B ROAD 4190 APPROXIMATELY 8.7 MILES TO THE JUNCTION OF THE ATCHEE RIDGE ROAD (COUNTY B ROAD 4270). CONTINUE ALONG COUNTY B ROAD 4190 IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 4.3 MILES TO THE JUNCTION OF THE LONG DRAW ROAD (COUNTY B ROAD 4260). CONTINUE ALONG COUNTY B ROAD 4190 IN A SOUTHERLY, THEN WESTERLY DIRECTION APPROXIMATELY 4.0 MILES TO THE JUNCTION OF COUNTY B ROAD 4160. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4160 APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THE BITTER CREEK ROAD (COUNTY B ROAD 4120). EXIT LEFT AND PROCEED IN A WESTERLY DIRECTION ALONG COUNTY B ROAD 4120 APPROXIMATELY 1.9 MILES TO THE JUNCTION OF COUNTY B ROAD 4230. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4230 APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THE ATCHEES WASH ROAD (COUNTY B ROAD 4240). EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4240 APPROXIMATELY 2.7 MILES TO A CLASS D COUNTY ROAD. EXIT LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 1.4 MILES TO THE SADDLETREE DRAW ROAD (COUNTY B ROAD 4230); EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4230 APPROXIMATELY 0.8 MILES TO A SERVICE ROAD; EXIT RIGHT AND PROCEED IN AN EASTERLY THEN NORTHERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 2.2 MILES TO THE PROPOSED ACCESS ROAD FOR THE ASPHALT WASH 10-23-13-33 WELL. FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 8,070 FEET TO THE PROPOSED 13-33 WELL PAD. PROCEED NORTHWESTERLY ACROSS THE WELL PAD APPROXIMATELY 200 FEET TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 1,670 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 77.1 MILES IN A SOUTHEASTERLY DIRECTION.

**2. Planned Access Roads:**

If this well is drilled prior to other wells using this same access, the proposed access road will be approximately 1,080 feet of new construction (ON-LEASE), and 8,660 new construction OFF-LEASE. Please refer to Topo Map "B" for the takeoff point for the new road construction.

**An application for a BLM road r-o-w is being filed with the BLM.**

The proposed access road will be utilized to transport personnel, equipment and supplies to and from the proposed well site during drilling, completion and production operations. The road will be utilized year round.

The access road will be crowned 2% to 3%, ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet right-of-way. Maximum grade of road is 5% or less. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. No fence crossings, culverts, turnouts, cattle guards or major cuts and fills are required. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches and the turnouts kept clear so that snowmelt will be channeled away from the road.

**3. Location of Existing Wells within a One-Mile radius (See "Topo" Map "C")**

**attached):**

The following wells are wells located within a one (1) mile or greater radius of the proposed location.

- a. None: Water Wells:
- b. None: Injection Wells:
- c. 7: Producing Wells:
  - i. Rock house 6D-32, SENW Sec 32-10S-23E
  - ii. Rock House 2D-32, NWNE Sec 32-10S-23E
  - iii. Rock House 12D-32, NWSW Sec 32-10S-23E
  - iv. Asphalt Wash 10-23-43-32 NESE Sec 32-10S-23E
  - v. Rock House 7-32-10-23 SWNE Sec 32-10S-23E
  - vi. Rock House 10D-32 NWSE Sec 32-10S-23E
  - vii. Rock House 5-32-10-23 SWNW Sec 32-10S-23E
- d. None: Drilling Wells:
- e. None: Shut-in Wells:
- f. None: Temporarily Abandoned Wells:
- g. None: Disposal Wells:
- h. None: Abandoned Wells:
- i. None: Dry Holes:
- j. None: Observation Wells:
- k. 23: Pending (staked) Wells:  
Enduring Resources, LLC is permitting 23 other wells within one mile of this well.  
See Plat "C" attached.

#### 4. **Location of Existing and/or Proposed Facilities:**

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank and be independent of the back cut.

All permanent (on site for six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the rocky Mountain Five State Inter-Agency Committee

All facilities will be painted within 6 months of installation. The color shall be Desert Tan. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Gas Gathering Pipeline: ON-LEASE 1,080' SITLA  
OFF-LEASE 590' BLM OFF-LEASE pipeline

***If this well is drilled prior to the Asphalt Wash 10-23-13-33, then an additional 8,070' of pipeline r-o-w will need to be acquired from the BLM.***

***A application for 8,660' of BLM pipeline r-o-w is being submitted.***

If the well is capable of economic production, a surface gas gathering line and related equipment shall be installed. The surface gas gathering line shall be in use year round. If this well is drilled first, a total of approximately 9,740 feet of surface gas gathering pipeline shall be laid on the surface to minimize surface disturbance:

- a. ON-LEASE approximately 1,080 feet, and
- b. OFF-LEASE approximately 8,660 feet
  - i. For the first 1,670' closest to the well a 3 inch or less diameter steel, unpainted, welded gas gathering line is proposed.
  - ii. The balance (8,070') of the pipeline which will be used by one other well to be drilled in this same area shall be 4 inch diameter steel unpainted, welded gas gathering line.

The proposed pipeline will begin at the well site; and be laid on the surface next to the new access road going approximately 1,670' south (3"), and then when the pipeline reaches the Asphalt Wash 10-23-13-33 Well the pipeline will continue to follow the multi-well lease road southerly 8,070' (4") and tie-in directly to an existing pipeline which is located at the Acosta Federal No. 1 well in the SWSW of Sec 33, T10S-R23E.

The meter run will be housed. The gas gathering line will be buried or anchored down from the wellhead to the meter.

Upon plugging and abandonment, the gas gathering line will be removed and the disturbed area will be re-contoured and restored as near as practical to the original condition. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

##### **5. Location and Type of Water Supply:**

Whenever practical, water will be obtained from Enduring Resources LLC Water Right Number 49-2215 or Water Right Number 49-2216 (\*See Townships of permitted Use below). If those sources are not available, then one of the two following sources shall be used: Target Trucking Water User Claim #43-2195, or by Dalbo Inc. Water User Claim #43-8496.

\*Enduring Water Permits' Townships of Use:

T10S-R22E	T11S-R22E	T12S-R22E
<b>T10S-R23E</b>	T11S-R23E	T12S-R23E
T10S-R24E	T11S-R24E	T12S-R24E

Water will be hauled to the location over the roads marked on "Topo" Maps "A" and "B."

No water well is to be drilled on this lease.

**6 Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized for location and access road construction.

Any gravel will be obtained from a commercial source; however, gravel sized rock debris associated with location and access road construction may be used as access road surfacing material.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break or allow discharge of liquids.

The reserve pit will be lined with ¼ inch felt and a minimum of 16 mm plastic with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

A chemical portable toilet will be furnished with the drilling rig. The toilet will be replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

Garbage, trash and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well.

Produced oil will be stored in an oil tank and then hauled by truck to a crude purchaser facility. Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to an approved disposal site.

**8. Ancillary Facilities:**

During drilling operations, approximately 20 days, the site will be a manned camp. Three or four additional trailers will be on location to serve as the crews' housing and eating facilities. These will be located on the perimeter of the pad site within the topsoil stockpiles. Refer to Sheet 4.

**9. Well Site Layout: (Refer to Sheets #2, #3, and #4)**

The attached Location Layout Diagrams described drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s) and surface material stockpiles(s).

Please see the attached diagram for rig orientation and access roads.

The top soil will be windrowed rather than piled. It will be reseeded and track walker at the time the location is constructed. Seeding will be with the determined during the onsite. (Refer to "Seed Mixture for Windrowed Top Soil Will included:" following herein.

The top soil removed from the pit area will be store separately and will not be reseeded until the pit is reclaimed.

All pits shall be fence to the following minimum standards:

- a. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- b. The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches over the new wire. Total height of the fence shall be at least 42 inches.
- c. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- d. Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two fence posts shall be no greater than 16 feet.

- e. All wire shall be stretched by, using a stretching device, before it is attached to corner posts.
- f. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.
- g. Location size may change prior to drilling the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling, the location will be re-surveyed and a Form 9 will be submitted.

**10. Plans for Surface Reclamation:**

**Producing Location:**

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, materials, trash and debris not required for production.
- b. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 40CFR 3162.7.
- c. Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximated natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.
- e. To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface 3 feet above surrounding round surface to allow the reclaimed pit area to drain effectively.
- f. Upon completion of back filling, leveling and re-contouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).



**Dry Hole/Abandoned Location:**

- i. Abandoned well sites, roads and other disturbed areas will be restored as nearly as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions and re-establishment of vegetation as specified.
- ii. All disturbed surfaces will be re-contoured to the approximated natural contours with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

**Seed Mixture for Windrowed Top Soil Will Included:**

To be provided by the DOG&M and SITLA.

**11. Surface Ownership: Location, Access and Pipeline Route:**

Wellsite: SITLA

Access: SITLA and BLM

Pipeline: SITLA and BLM

**12. Other Information****On-site Inspection for Location, Access and Pipeline Route:**

To be scheduled by SITLA and DOG&M.

**Special Conditions of Approval:**

Tanks and Production Equipment shall be painted specified by SITLA and DOG&M.

**Archeology:**

- a. A Cultural Resource Inventory Report is pending and to be prepared by Montgomery Archaeological Consultants.

**Paleontology:**

- a. A Paleontology Reconnaissance Report is pending and to be prepared by Intermountain Paleo-Consulting.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the Antiquities Act of June 8, 1906) are discovered, all operations which would affect such sites will be suspended and the discovery reported promptly to the

surface management agency.

**13, Lessee's or Operator's Representatives:**

**Representatives:**

Alvin R. (Al) Arlian  
Landman – Regulatory Specialist  
Enduring Resources, LLC  
475 17<sup>th</sup> Street, Suite 1500  
Denver, Colorado 80202  
Office Tel: 303-350-5114  
Fax Tel: 303-573-0461  
[aarlian@enduringresources.com](mailto:aarlian@enduringresources.com)

Frank Hutto  
Vice President – Operations  
Enduring Resources, LLC  
475 17<sup>th</sup> Street, Suite 1500  
Denver, Colorado 80202  
Office Tel: 303-573-5102  
Fax Tel: 303-573-0461  
[fhutto@enduringresources.com](mailto:fhutto@enduringresources.com)

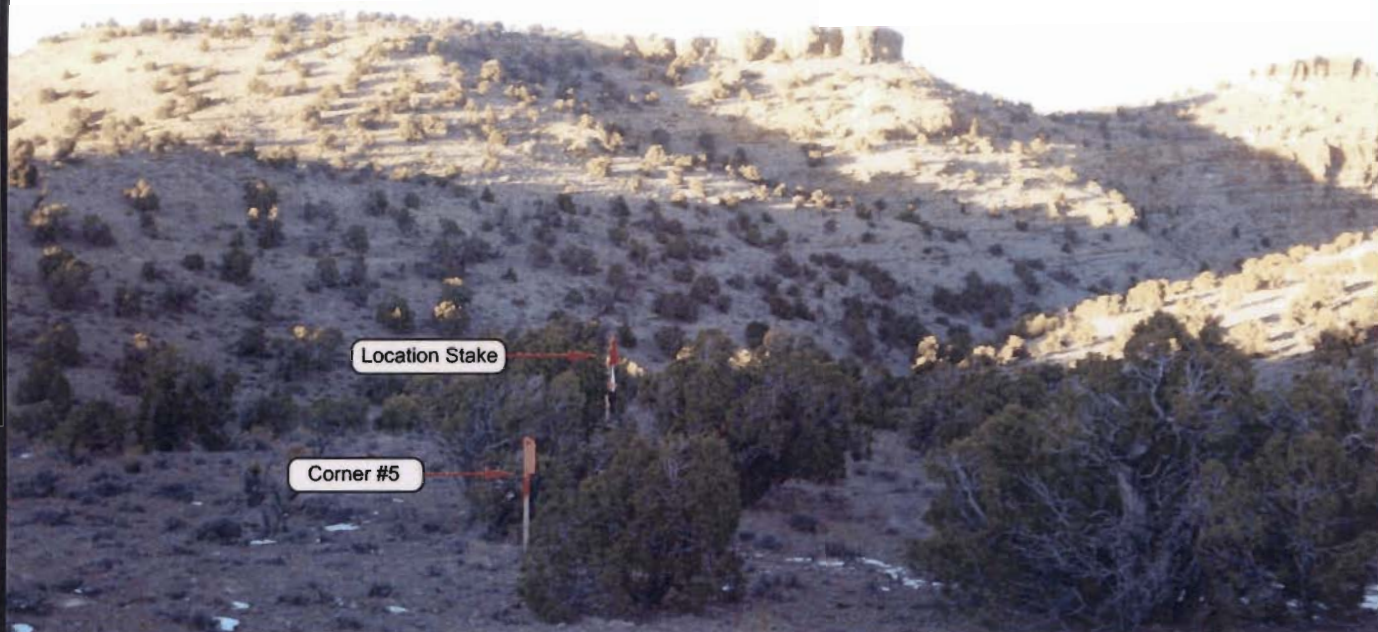


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

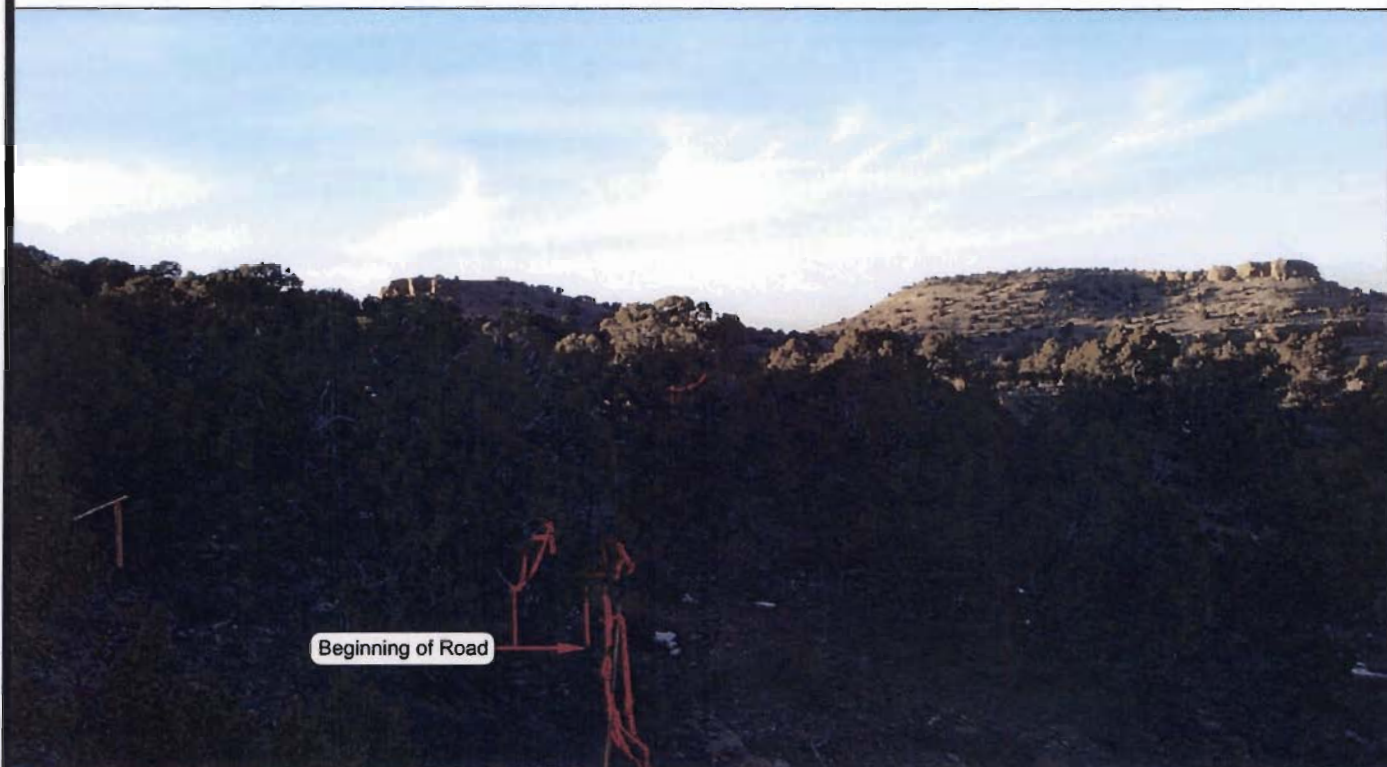


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHERLY

## ENDURING RESOURCES

**ASPHALT WASH 10-23-42-32**  
**SECTION 32, T10S, R23E, S.L.B.&M.**  
**1950' FNL & 500' FEL**

## LOCATION PHOTOS

TAKEN BY: D.J.S.

DRAWN BY: B.J.S.

DATE TAKEN: 12-22-05

DATE DRAWN: 01-09-06

REVISED:

**Timberline Land Surveying, Inc.**  
 38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

SHEET  
**1**  
 OF 10

# ENDURING RESOURCES

## CUT SHEET - ASPHALT WASH 10-23-42-32

**PREVAILING WIND** (indicated by an arrow pointing towards the top-left)

**ROUND CORNER TO AVOID EXCESS CUT** (at station 3+55)

**Top of Cut Slope** (at station 3+55)

**PIT TOPSOIL STOCKPILE** (at station 3+55)

**Existing Gilsonite Vein** (indicated by a dashed line)

**PROPOSED ACCESS ROAD TO 41-32** (at station 1+65)

**TOPSOIL STOCKPILE** (at station 1+65)

**ROUND CORNER TO AVOID EXCESS FILL** (at station 0+23)

**Toe of Fill Slope** (at station 0+23)

**ROUND CORNER TO AVOID ROAD** (at station 0+00)

**CONTOUR INTERVAL = 5'**

**STATIONING:** STA. 3+55, STA. 1+65, STA. 0+23, STA. 0+00

**ELEVATIONS:** 5755, 5750, 5725, 5700, 5685

**Dimensions:** 60', 165', 190', 55', 60', 40', 125', 165', 75', 40'

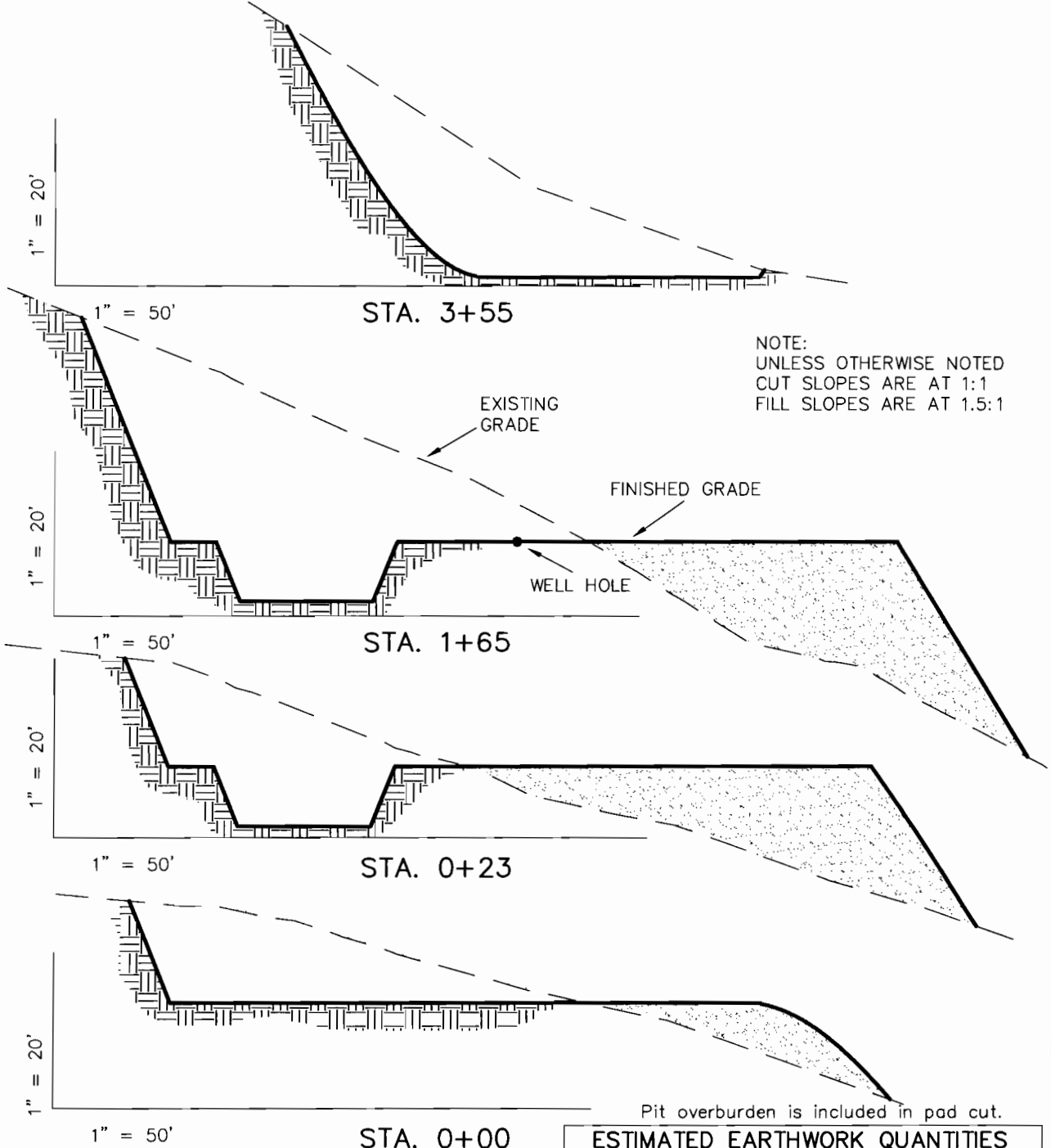
**Grades:** C/27.9, C/12.0, C/1.1, F/6.1, C/31.8, C/16.6, C/13.1, C/5.0, F/19.7, C/20.0, C/3.6, C/6.5, C/2.0, F/13.4

**Other Features:** FLORE PIT, RESERVE PITS (8' Deep), EXCESS MATERIAL, PROPOSED WELL HEAD: Ungraded Ground El. 5719.1', Finished Grade El. 5714.1'

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OF 10

# ENDURING RESOURCES

## CROSS SECTIONS - ASPHALT WASH 10-23-42-32



### REFERENCE POINTS

175' NORTH = 5683.8'  
225' NORTH = 5682.3'  
215' EAST = 5726.1'  
265' EAST = 5734.0

### ESTIMATED EARTHWORK QUANTITIES (No shrink or swell adjustments have been used) (Expressed in Cubic Yards)

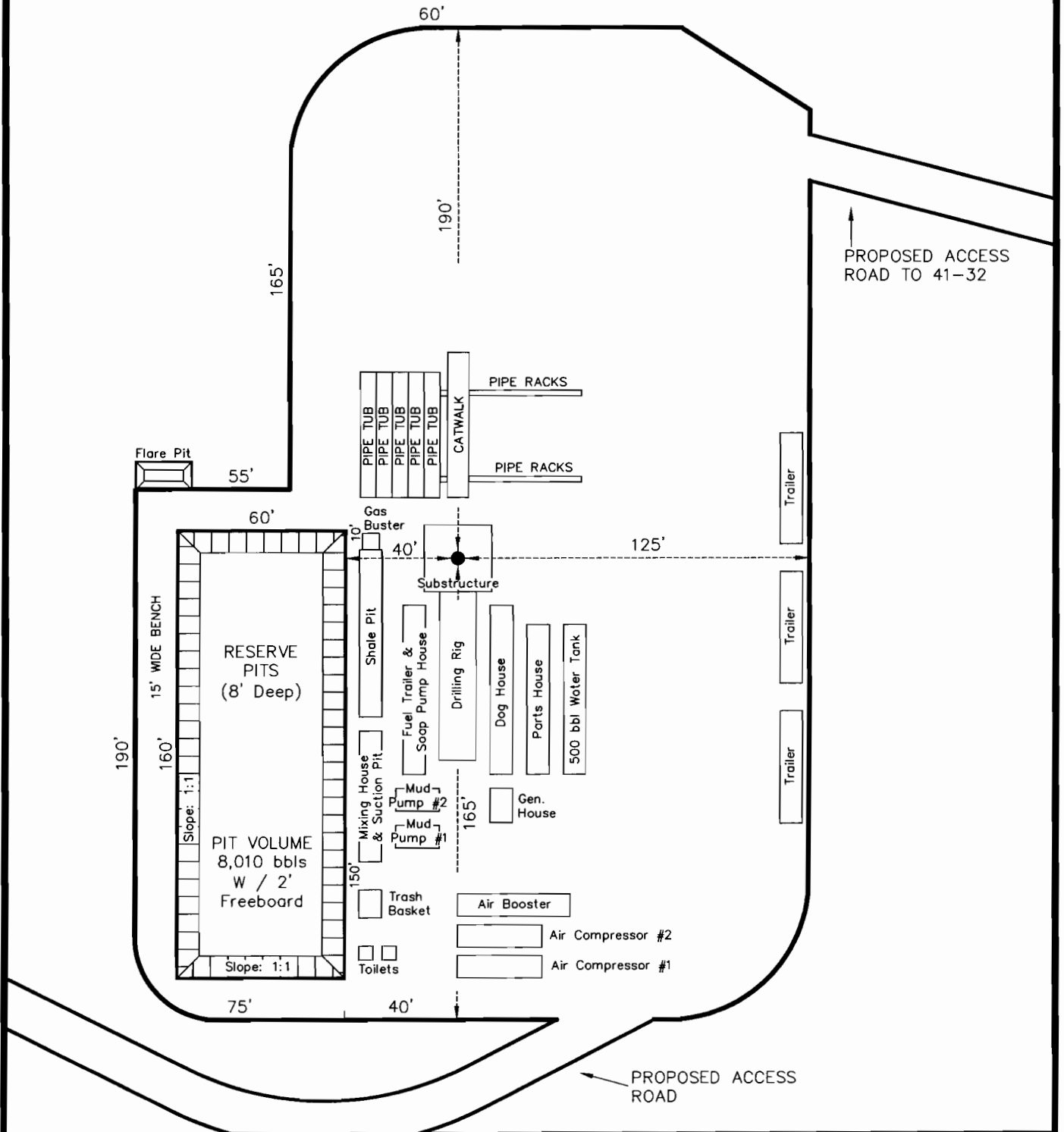
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	18,670	19,840	Topsoil is not included in Pad Cut	-1,170
PIT	2,340	0		2,340
TOTALS	21,010	19,840	1,410	1,170

Excess Material after Pit Rehabilitation = 0 Cu. Yds.

Section 32, T10S, R23E, S.L.B.&M.	Qtr/Qtr Location: SE NE	Footage Location: 1950' FNL & 500' FEL
Date Surveyed: 12-22-05	Date Drawn: 01-09-06	Date Last Revision:
Surveyed By: D.J.S.	Drawn By: B.J.S.	Scale: 1" = 50'
<b>Timberline</b> Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 789-1365		
SHEET 4 OF 10		

# ENDURING RESOURCES

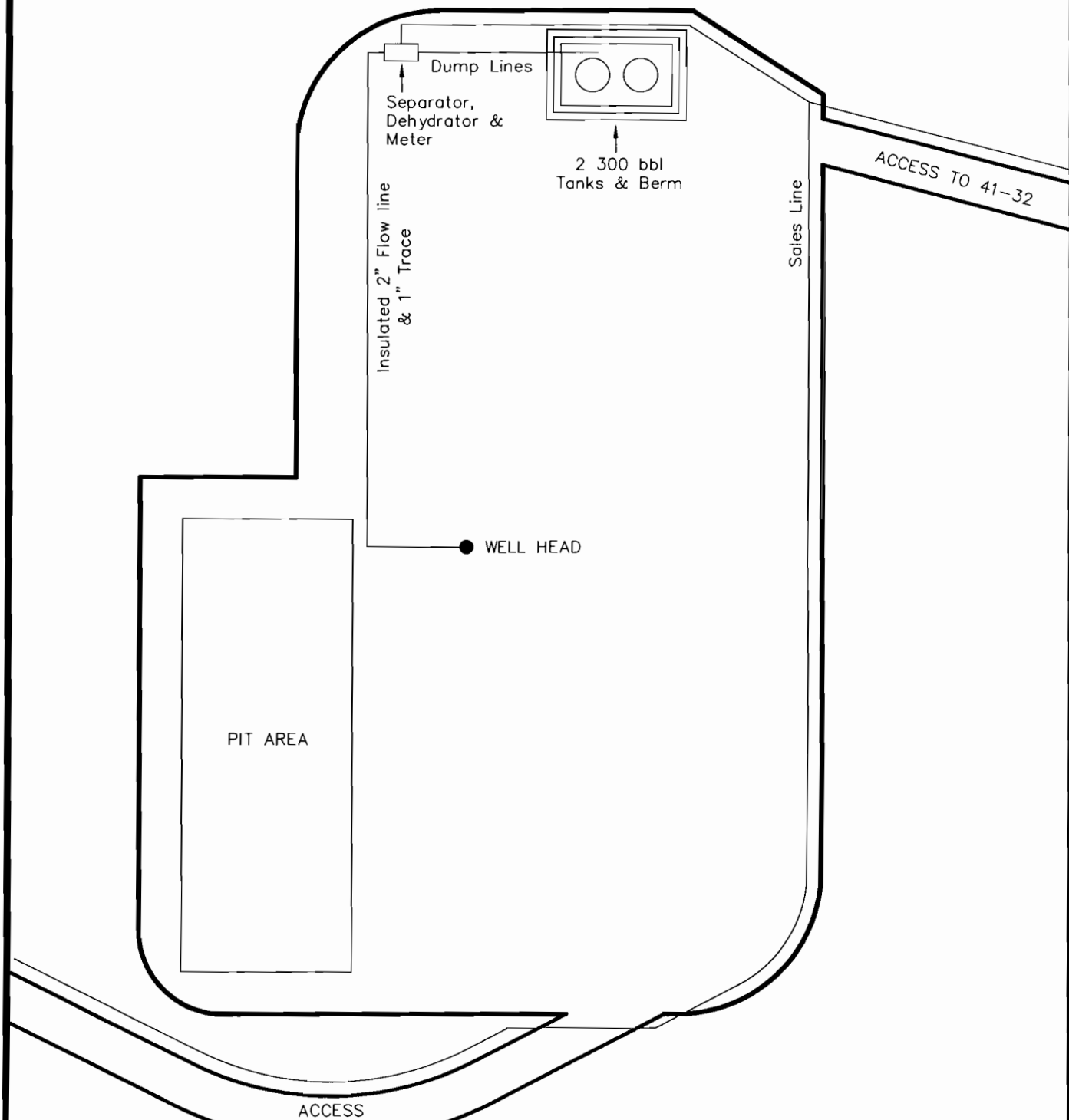
## TYPICAL RIG LAYOUT - ASPHALT WASH 10-23-42-32



Section 32, T10S, R23E, S.L.B.&M.		Qtr/Qtr Location: SE NE	Footage Location: 1950' FNL & 500' FEL
Date Surveyed: 12-22-05	Date Drawn: 01-09-06	Date Last Revision:	<b>Timberline</b> (435) 789-1365
Surveyed By: D.J.S.	Drawn By: B.J.S.	Scale: 1" = 50'	<b>Land Surveying, Inc.</b>
38 WEST 100 NORTH VERNAL, UTAH 84078			<b>SHEET 5 OF 10</b>

# ENDURING RESOURCES

TYPICAL PRODUCTION LAYOUT - ASPHALT WASH 10-23-42-32



Section 32, T10S, R23E, S.L.B.&M.		Qtr/Qtr Location: SE NE	Footage Location: 1950' FNL & 500' FEL
Date Surveyed: 12-22-05	Date Drawn: 01-09-06	Date Last Revision:	<b>Timberline</b> (435) 789-1365
Surveyed By: D.J.S.	Drawn By: B.J.S.	Scale: 1" = 50'	<b>Land Surveying, Inc.</b>
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#### LEGEND

- = PROPOSED WELL LOCATION
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- - - = PROPOSED ACCESS ROAD
- B-5460 = COUNTY ROAD CLASS & NUMBER

#### TOPOGRAPHIC MAP "A"

SCALE: 1"=10,000'

DRAWN BY: B.J.S.

DATE SURVEYED: 12-22-05

DATE DRAWN: 01-09-06

REVISED:

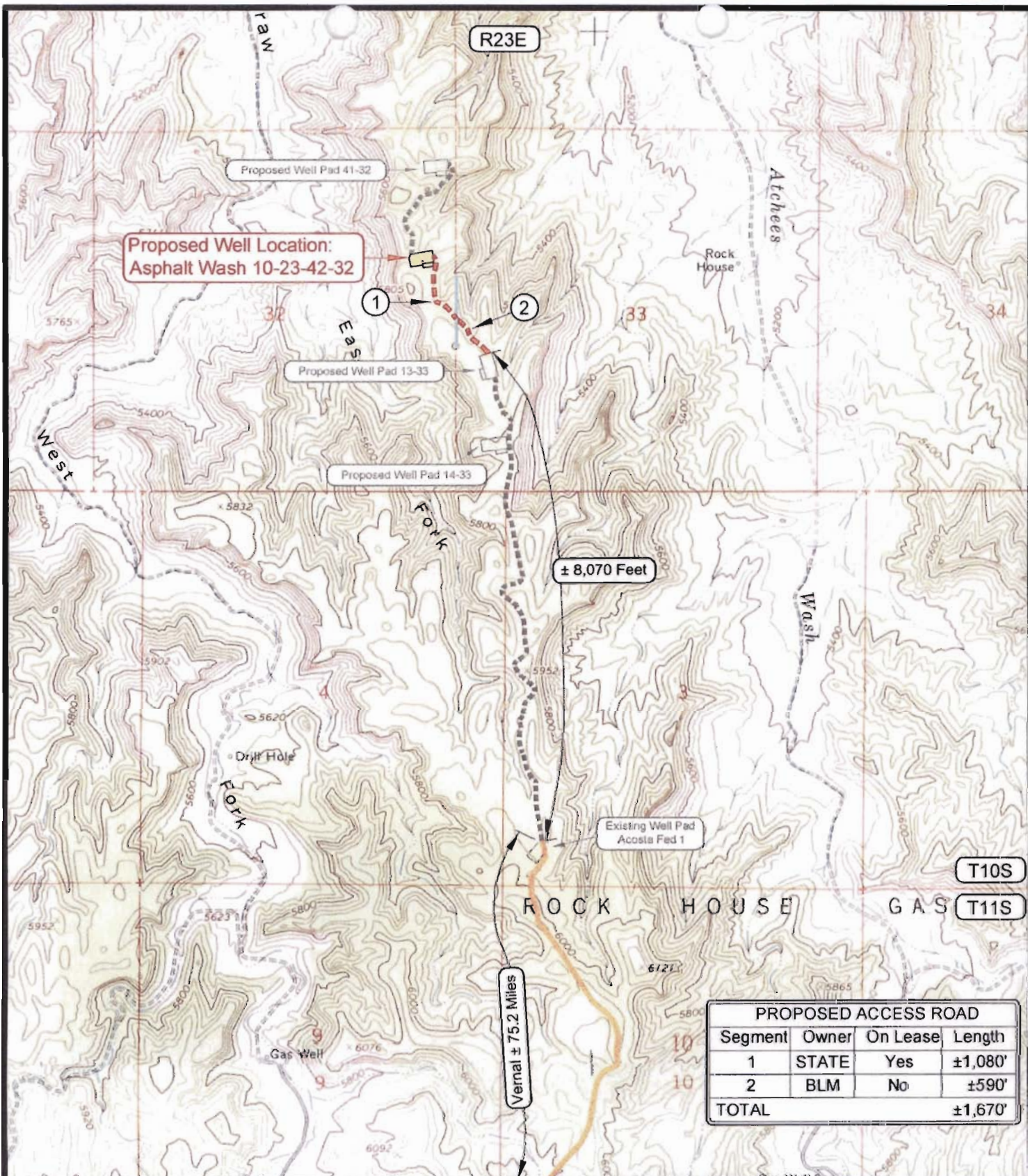
#### ENDURING RESOURCES

**Asphalt Wash 10-23-42-32**  
**SECTION 32, T10S, R23E, S.L.B.&M.**  
**1950' FNL & 500' FEL**

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**SHEET**  
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**OF 10**





#### LEGEND

- PROPOSED ACCESS ROAD  
 ■ ■ ■ ■ ■ = SUBJECT WELL  
 ■ ■ ■ ■ ■ = OTHER WELLS  
 — = EXISTING ROAD  
 — = EXISTING ROAD (TO BE IMPROVED)  
 (B-5460) = COUNTY ROAD CLASS & NUMBER  
 — = LEASE LINE AND / OR PROPERTY LINE

#### TOPOGRAPHIC MAP "B"

SCALE: 1" = 2000'

DRAWN BY: B.J.S.

DATE SURVEYED: 12-22-05

DATE DRAWN: 01-09-06

REVISED:

#### ENDURING RESOURCES

**ALPHALT WASH 10-23-42-32**  
**SECTION 32, T10S, R23E, S.L.B.&M.**  
**1950' FNL & 500' FEL**

**Timberline Land Surveying, Inc.**

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SHEET

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OF 10



R23E

Saddletree

Draw

Rock House  
10-23-24-29Rock House  
10-23-34-29ASPHALT WASH  
10-23-14-28Rock House  
10-23-12-32Rock House  
3-32-10-23Asphalt Wash  
10-23-41-32ASPHALT WASH  
10-23-31-33Rock House  
2D-32ASPHALT WASH  
10-23-11-33ASPHALT WASH  
10-23-21-33Rock House  
5-32-10-23Rock House  
6D-32Rock House  
7-32-10-23ASPHALT WASH  
10-23-12-33ASPHALT WASH  
10-23-22-33ASPHALT WASH  
10-23-32-33ASPHALT WASH  
10-23-42-33Rock House  
6D-32Rock House  
10D-32**Proposed Surface Position:  
Asphalt Wash 10-23-42-32**Rock House  
10-23-23-32ASPHALT WASH  
10-23-43-32ASPHALT WASH  
10-23-13-33ASPHALT WASH  
10-23-23-33ASPHALT WASH  
10-23-33-33Rock House  
12D-32Rock House  
10-23-24-32ASPHALT WASH  
10-23-44-32ASPHALT WASH  
10-23-14-33ASPHALT WASH  
10-23-34-33ROCK HOUSE  
10-23-34-32ASPHALT WASH  
10-23-24-33

T10S

T11S

## LEGEND

- = DISPOSAL WELL
- = PRODUCING WELL
- = SHUT IN WELL
- = PROPOSED WELL
- = WATER WELL
- = ABANDONED WELL
- = TEMPORARILY ABANDONED WELL
- ⊕ = ABANDONED LOCATION

## TOPOGRAPHIC MAP "C"

DATE SURVEYED: 12-22-05

DATE DRAWN: 01-09-06

SCALE: 1" = 2000'

DRAWN BY: B.J.S.

REVISED:

## ENDURING RESOURCES

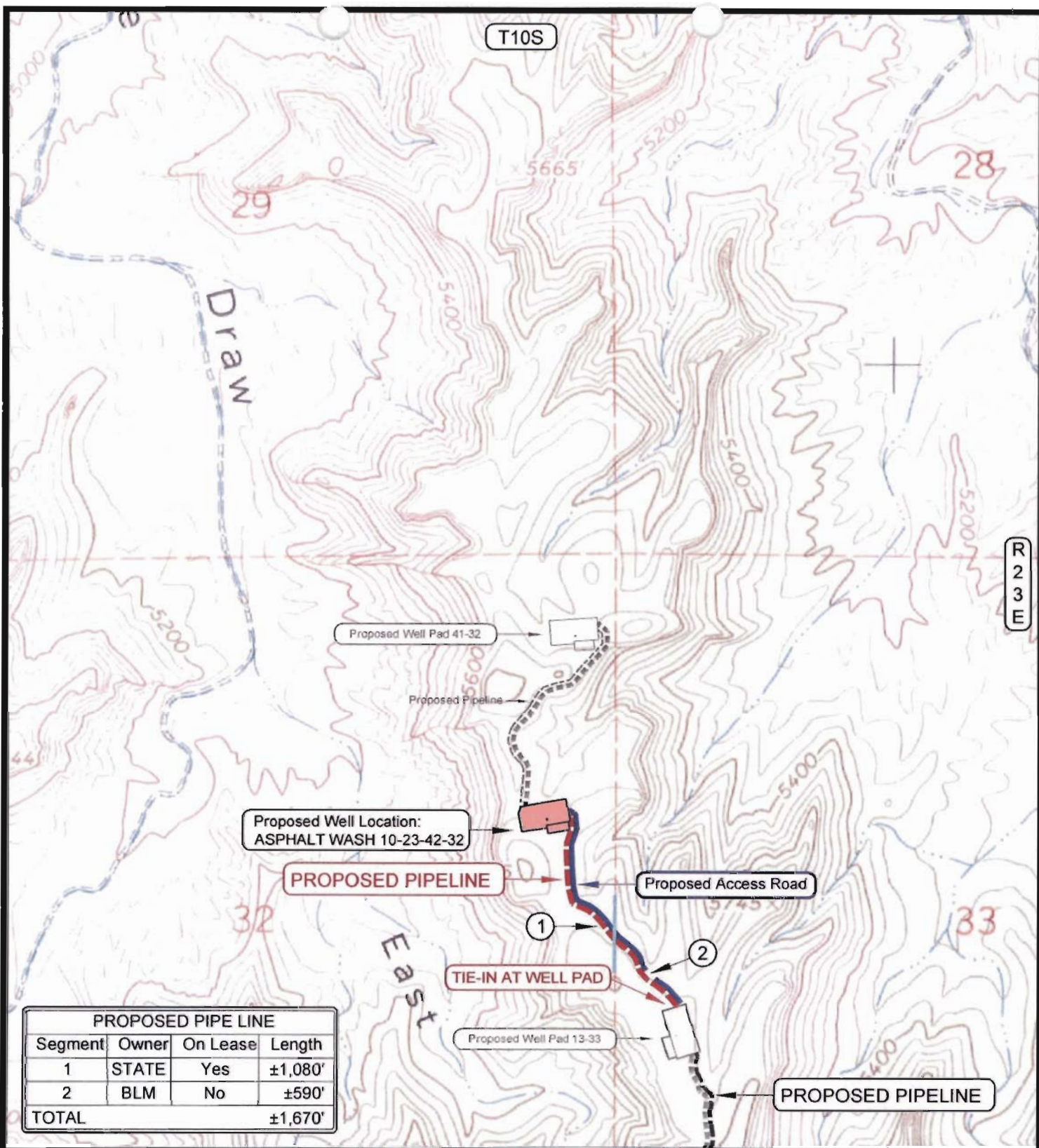
**ASPHALT WASH 10-23-42-32**  
**SECTION 32, T10S, R23E, S.L.B.&M.**  
**1950' FNL & 500' FEL**

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 OF 10





APPROXIMATE PIPELINE LENGTH = 1'670'

#### LEGEND

---	= PROPOSED PIPELINE	---	= LEASE LINE AND / OR PROPERTY LINE
---	= OTHER PIPELINE		
---	PROPOSED ACCESS ROAD		
---	= SUBJECT WELL		
---	= OTHER WELLS		

TOPOGRAPHIC MAP "D"

DATE SURVEYED: 12-22-05

DATE DRAWN: 01-09-06

SCALE: 1" = 1000'

DRAWN BY: B.J.S.

REVISED:

#### ENDURING RESOURCES

**ASPHALT WASH 10-23-42-32**  
**SECTION 32, T10S, R23E, S.L.B.&M.**  
**1950' FNL & 500' FEL**

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SHEET  
 10  
 OF 10

3,000 PSI

# BOP STACK

